



# I/O MODULE INSTALLATION GUIDE

## **SUPERSTACK II REMOTE ACCESS SYSTEM 1500**

This guide describes how to install V.34 (analog), ISDN-BRI or a combination of V.34 and ISDN-BRI modules into the RAS 1500 Base Unit or RAS 1500 Expansion unit. It includes the following:

- Overview
- Related Documentation
- Contacting 3Com
- Before You Begin
- Installing and Removing I/O Modules
- Swapping I/O Modules
- Powering the Unit On or Off

Visit 3Com's web site (<http://www.3Com.com/ras1500>) for the latest SuperStack II Remote Access System 1500 code and documentation.

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**Overview**

The I/O modules are inserted into the RAS 1500 Base Unit or RAS 1500 Expansion unit. The RAS 1500 and RAS 1500 Expansion provide remote-access services and terminal server functions, via analog and BRI ISDN connections.

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**Related Documentation**

RAS 1500 documentation is available on the Resource CD that you received with the Base Unit. The complete RAS 1500 documentation set is available at <http://www.3com.com/ras1500>.

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**Contacting 3Com**

Use this chart as a reference when you need to contact 3Com.

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**Contacting 3Com**

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3Com Corp. - 5400 Bayfront Plaza - P.O. Box 58145 - Santa Clara, CA - 95052-8145

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Internet

<http://www.3Com.com>

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For a complete listing of support and contact numbers, refer to Appendix E, "Technical Support," of the Installing and Configuring the RAS 1500 Guide.

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**Before You Begin**

Before you begin installation, you should:

- confirm you have the required equipment,
- check that your I/O Module package contains everything it should.

Contact your network administrator for assistance.

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**You Should Have Received**

The following items should be included in your I/O Module package:

- This I/O module installation guide,
- a 4-port V.34 modem module or 2-port ISDN BRI module,
- ISDN or regular telephone cables.

## Installing and Removing I/O Modules

### Installing an I/O Module

You can install V.34 (analog), ISDN-BRI or a combination of V.34 and ISDN-BRI modules in the RAS 1500 or RAS 1500 Expansion unit.

Use the following steps to install an I/O module:



**CAUTION:** *The modules are not hot-swappable. **Power off the unit before installing, removing, or exchanging the module.** Failure to do so could damage the modules.*

- 1 Before installing the I/O module, you must remove power from the unit being upgraded. Remove the AC power cord from the back of the RAS 1500 Base Unit or RAS 1500 Expansion unit.
- 2 Remove the blank plate from the I/O module slot.
- 3 Unpack the I/O module from the box and remove the protective covering.

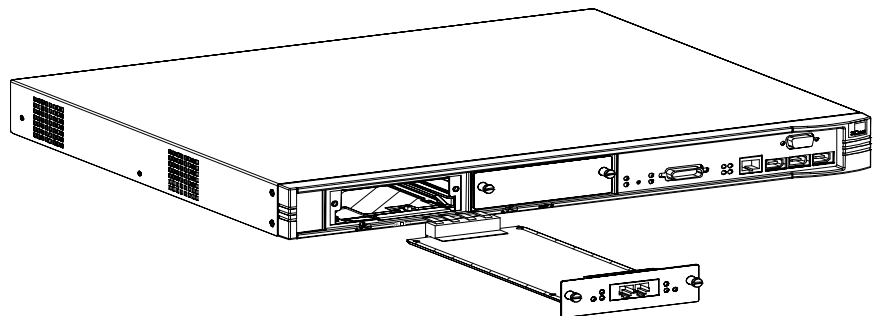


**WARNING:** *Do not plug telephone cables into the I/O module until it is installed in the unit. It could result in electric shock.*

- 4 Position the I/O module in front of the empty slot so it is ready to slide in.



*I/O modules should be installed in the left slot (slot 1) first.*



- 5 Slide the I/O module into the slot until it is firmly in place.
- 6 Using the thumbscrews, screw the I/O module in place.

## Removing an I/O Module

Use the following steps to remove an I/O module:



**CAUTION:** *The modules are not hot-swappable. **Power off the unit before installing, removing, or exchanging the modules.** Failure to do so could damage the modules.*

- 1 Remove the AC power cord from the back of the RAS 1500 or RAS 1500 Expansion to power off the unit.



**WARNING:** *Remove the telephone cables from the module before you remove the module from the unit. Failure to do so could result in electric shock.*

- 2 Remove the telephone cables from the I/O module.
- 3 Loosen the two screws on the I/O module.
- 4 Place the screwdriver provided with the RAS 1500 in the small hole beneath the I/O module's slot and push until the module ejects out of place.
- 5 Remove the I/O module from the slot.
- 6 If you are not replacing the I/O module, you must install a blank face plate.



*Leaving the I/O slot open presents a potential safety hazard and the unit may no longer meet FCC requirements.*

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## Swapping I/O Modules

If you swap a Basic Rate Interface (BRI) I/O module and analog I/O module, reset the modem's settings. Otherwise, ports could hang. Two examples are provided below. Be sure to provide the proper interface (rm0, pem0, or pemX), slot (slot:1 or slot:2), and port numbers.

To reset an analog modem's configuration to the factory-default settings, use the following CLI command:

```
set switched interface rm0/slot:1/mod:1 at_command AT&F0&W
```

To reset an ISDN modem's configuration to the factory-default settings, use the following CLI commands:

```
set switched interface rm0/slot:1/mod:1 at_command AT&F0&W
set switched interface rm0/slot:1/mod:1 at_command ATZ!
```

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**Powering the Unit  
On or Off**

To power on the RAS 1500 Base Unit or RAS 1500 Expansion unit:

- 1** Connect the power cord to the AC power port of the unit.
- 2** Plug the power cord into the AC power supply source. The unit starts up.

To power off the RAS 1500 or RAS 1500 Expansion:

- Remove the AC power cord from the AC power port of the unit.

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